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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/091,457	03/07/2002	Yoshihiro Ishikawa	220416US2	8789
22850	7590	03/23/2005		
OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT, P.C. 1940 DUKE STREET ALEXANDRIA, VA 22314			EXAMINER AMINZAY, SHAIMA Q	
			ART UNIT	PAPER NUMBER
			2684	

DATE MAILED: 03/23/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Supplemental Notice of Allowability

Application No.

10/091,457

Applicant(s)

ISHIKAWA, YOSHIHIRO

Examiner

Shaima Q. Aminzay

Art Unit

2684

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to November 4, 2004.
2. ☒ The allowed claim(s) is/are 1, 4-5, 8-11, 14-15, and 18-20.
3. ☒ The drawings filed on 07 March 2002 are accepted by the Examiner.
4. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☒ All b) ☐ Some* c) ☐ None of the:
 1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☒ Information Disclosure Statements (PTO-1449 or PTO/SB/08),
Paper No./Mail Date June 4, 2002
4. ☐ Examiner's Comment Regarding Requirement for Deposit
of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☒ Interview Summary (PTO-413),
Paper No./Mail Date _____.
7. ☐ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☒ Other See Continuation Sheet.

Continuation of Attachment(s) 9. Other: Send a copy of the signed IDS and Notice of Allowance dated, March 21, 2005 to the applicant representative.

DETAILED ACTION

Allowable Subject Matter

1. Claims 1, 4-5, 8-11, 14-15, 18-20 are allowed.

Reasons for Allowance

2. The following is an examiner's statement of reason for allowance:

The applicant filed amendment on November 4, 2004 in response to office action August 2, 2004, and the amendments to the independent claims 1, 5, 8, 9, 11, 15, 18 and 19 overcome the prior art rejection which puts the application in conditions for allowance.

None of the prior art of the record either singularly or in combination teaches or fairly suggests method and apparatus of the followings:

"required receiving power R in the radio channel is calculated by an equation represented by a required receiving power $R_{sub.0}$ when interference does not exist at all at a receiver, and a ratio $P_{total} / .P$ of the total power P_{total} transmitted from the transmitting station and the transmission power P of the predetermined radio channel transmitted from the transmitting station", as disclosed in claims 1, and 11.

" $R = R_o (1 / (1 - (\Lambda / \rho g) (P_{total} / P)))$ herein, Λ is a signal to noise (interference is included) power ratio required at the receiver, and ρg is a spread gain" as disclosed in claims 4, and 14.

" $R = R_o (1 / (1 - (\Lambda / \rho g) (1/\zeta)))$ herein, R_o is a required receiving power when interference does not exist at all at the receiver, Λ is a signal to noise (interference is included) power ratio required at the receiver, ρg is a spread gain, ζ is a ration of the transmission power of the predetermined radio channel transmitted from the transmitting station to the total transmission power", as disclosed in claims 5.

" $R = R_o (1 / (1 - (\Lambda / \rho g) (Y / \zeta)))$ herein, R_o is a required receiving power when interference does not exist at all at the receiving station, Λ is a signal to noise (interference is included) power ratio required by the receiving station, ρg is a spread gain, P is the transmission power of the predetermined radio channel transmitted from the transmitting station, P_{total} is the total transmission power from the transmitting station, ζ is a ration of the transmission power of the predetermined radio channel transmitted from the transmitting station to the total transmission power", as disclosed in claims 15.

" $R = R_o (1 / (1 - (\Lambda / \rho g) (P_{total} / P)(Y)))$, or $R = R_o (1 / (1 - (\Lambda / \rho g) (Y / \zeta)))$

herein, R_o is a required receiving power when interference does not exist at all at the receiving station, Λ is a signal to noise (interference is included) power ratio required by the receiving station, ρg is a spread gain, P is the transmission power of the predetermined radio channel transmitted from the transmitting station, P_{total} is the total transmission power from the transmitting station, ζ is a ration of the transmission power of the predetermined radio channel transmitted from the transmitting station to the total transmission power, and Y is a coefficient multiplied to interference from the transmitting station in communication with the receiving station.", as disclosed in claims 8, and 18.

" $R = R_o (1 / (1 - (\Lambda / \rho g) (P_{total} / P) (1+F)))$, or $R = R_o (1 / (1 - (\Lambda / \rho g) ((1+F) / \zeta)))$ herein, R_o is a required receiving power when interference does not exist at all at the receiving station, Λ is a signal to noise (interference is included) power ratio required by the receiving station, ρg is a spread gain, P is the transmission power of the predetermined radio channel transmitted from the transmitting station, P_{total} is the total transmission power from the transmitting station, Y is a coefficient multiplied to interference from the transmitting station in communication with the receiving station, and F is a power ratio of a total interference from transmitting stations other than the transmitting station in communication with the receiving station, and an interference from the transmitting station in communication with the receiving station ", as disclosed in claims 9, and 19.

$$R = R_o \left(\frac{1}{1 - (\Lambda / \rho g) (P_{total} / P) (Y + F)} \right), \text{ or } R = R_o \left(\frac{1}{1 - (\Lambda / \rho g) ((Y + F) / \zeta)} \right)$$
 herein, R_o is a required receiving power when interference does not exist at all at the receiving station, Λ is a signal to noise (interference is included) power ratio required by the receiving station, ρg is a spread gain, P is the transmission power of the predetermined radio channel transmitted from the transmitting station, P_{total} is the total transmission power from the transmitting station, ζ is a ration of the transmission power of the predetermined radio channel transmitted from the transmitting station to the total transmission power, and F is a power ratio of a total interference from transmitting stations other than the transmitting station in communication with the receiving station, and an interference from the transmitting station in communication with the receiving station", as disclosed in claims 10, and 20.

Cited reference Ozluturk (Ozluturk U. S. Patent 5842114) in view of Mimura (Mimura U. S. Patent 6393005) teaches a method and an apparatus of a "wireless communication system which dynamically adjusts the power of signals transmitted over global channels from a base station to minimize power spillover to adjacent communication cells" (Ozluturk, column 1, lines 8-14), and "the system monitors the total transmit power of the base station and dynamically adjusts the global channel transmit power as a function of the total transmit

power of the base station as measured at the base station" (Ozluturk, column 1, lines 23-27), and to provide a "method and device for controlling the transmitting power of a base station in a CDMA cellular system that can reduce degradation in forward speech quality in cases in which the total base station transmitting power increases and the base station is unable to transmit the power desired by mobile stations" (Mimura, column 1, lines 10-14)

However, the cited reference Ozluturk in view of Mimura do not expressly teach **"required receiving power R in the radio channel is calculated by an equation represented by a required receiving power $R_{sub.0}$ when interference does not exist at all at a receiver, and a ratio P_{total} / P of the total power P_{total} transmitted from the transmitting station and the transmission power P of the predetermined radio channel transmitted from the transmitting station"**

For these reasons, independent claims 1, 5, 8, 9, 11, 15, 18, and 19 are allowed. Claims 4, 10, 14, and 20 are depend on the independent claims 1, 8, 11, and 18 are allowed under the same reasons set forth in claims 1, 8, 11, and 18.

3. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should

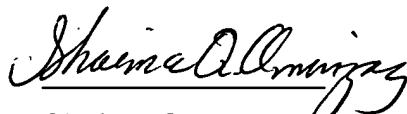
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preferably accompany the issue fee. Such submissions should be clearly labeled

"Comments on Statement of Reasons for Allowance."


Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Shaima Q. Aminzay whose telephone number is 703-305-8723. The examiner can normally be reached on 7:00 AM -5:00 PM. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nay Maung can be reached on 703-308-7745, the primary examiner, Nick Corsaro can be reached on 703-306-5616, the primary examiner, Nick Corsaro can be reached on 703-306-5616. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Shaima Q. Aminzay

(Examiner)

March 21, 2005


NICK CORSARO
PRIMARY EXAMINER

Nick Corsaro

(Primary Examiner)

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